



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>C07C 7/152</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 00/56684</b> <b>(43) International Publication Date:</b> 28 September 2000 (28.09.00)
<b>(21) International Application Number:</b> PCT/GB00/00942 <b>(22) International Filing Date:</b> 15 March 2000 (15.03.00)  <b>(30) Priority Data:</b> 9906731.6                      24 March 1999 (24.03.99)                      GB  <b>(71) Applicant (for all designated States except US):</b> BG INTELLECTUAL PROPERTY LTD. [GB/GB]; 100 Thames Valley Park Drive, Reading, Berkshire RG6 1PT (GB).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> BROWN, Richard, Allen [GB/GB]; 12 Buckbury Croft, Solihull B90 4YJ (GB). SMITH, Gareth, Richard [GB/GB]; 11 Cunningham Avenue, Inverurie, Aberdeenshire AB51 3TZ (GB). WILLIAMS, Andrew, Richard [GB/GB]; 121 Church Street, Burbage, Hinckley, Leicestershire LE10 2DB (GB). HAYNES, David, Alan [GB/GB]; 98 Beaumont Road, Barrow upon Soar, Loughborough LE12 8PJ (GB). TAYLOR, Mark, Raymond [GB/GB]; 8 Rosemead Drive, Leicester LE2 5SE (GB).  <b>(74) Agent:</b> ILLINGWORTH-LAW, William; BG Intellectual Property Ltd., 100 Thames Valley Park Drive, Reading, Berkshire RG6 1PT (GB).		<b>(81) Designated States:</b> AU, CA, CN, ID, IN, JP, LK, MX, NZ, PL, TR, TT, US, VN, ZA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> FORMATION, PROCESSING, TRANSPORTATION AND STORAGE OF HYDRATES		
<b>(57) Abstract</b>  The present invention relates to economically advantageous methods of forming, processing, transporting and storing fluids, especially natural gas in the form of solid crystalline gas hydrates. It has been found that fluid can be removed from a mixture of hydrate, liquid and optionally gas using a two stage fluid separation process in which a more efficient, but generally more expensive, fluid removing efficiency separation service is used for the second stage. A number of separation devices are also disclosed. A device for effectively and economically cooling substantially dry hydrate is also disclosed, as is a method for economically storing and transporting hydrate.		

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# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/GB 00/00942

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07C7/152

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EP0-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 93 01153 A (GUDMUNDSSON) 21 January 1993 (1993-01-21) page 10; claim 1; figure 3 ---	1,4
A	PATENT ABSTRACTS OF JAPAN vol. 15, no. 325, 19 August 1991 (1991-08-19) & JP 03 122497 A (NIPPON DENSO CO), 24 May 1991 (1991-05-24) abstract ---	12,13,15
A	PATENT ABSTRACTS OF JAPAN vol. 9, no. 91, 19 April 1985 (1985-04-19) & JP 59 225127 A (TOKYO GAS KK), 18 December 1984 (1984-12-18) abstract --- -/--	22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Bertram, H

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 617 030 A (R.T.HEATH) 14 October 1986 (1986-10-14) the whole document</p> <p>-----</p>	1

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Information on patent family members

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